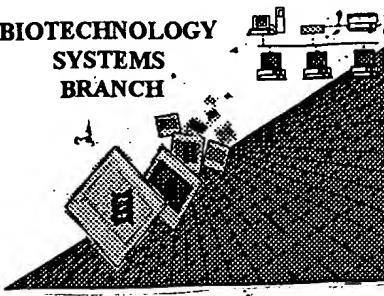


BIOTECHNOLOGY
SYSTEMS
BRANCH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/909,566
Source: O/PE
Date Processed by STIC: 8/2/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
 - 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
- FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW:

Checker Version 3.0

The Checker Version 3.0 application is a state-of the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 – 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:
<http://www.uspto.gov/web/offices/pac/checker>

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/909,566

DATE: 08/02/2001
TIME: 11:03:33

Input Set : A:\BB1465 US NA Seq Listing.txt
Output Set: N:\CRF3\08022001\I909566.raw

Does Not Comply
Corrected Diskette Needed

3 <110> APPLICANT: Cahoon, Edgar B
 5 <120> TITLE OF INVENTION: A Cytochrome P450 enzyme associated with the synthesis of ?

12-epoxy
 6 fatty acids
 8 <130> FILE REFERENCE: BB1465 US NA
 10 <140> CURRENT APPLICATION NUMBER: US/09/909,566
 11 <141> CURRENT FILING DATE: 2001-07-20
 12 <150> PRIOR APPLICATION NUMBER: 60/219833
 14 <151> PRIOR FILING DATE: July 21, 2000 2020-07-21 ← use this date format
 16 <160> NUMBER OF SEQ ID NOS: 7
 18 <170> SOFTWARE: Microsoft Office 97
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 1733
 22 <212> TYPE: DNA
 23 <213> ORGANISM: Euphorbia lagascae
 25 <400> SEQUENCE: 1

26	gcataaaaagg	aaaatggagc	agaaaaaatct	ctctttccg	agcattttaa	taagtttct	60
27	gcttgttta	atcttagtag	tagtcatgag	gttgtggaaag	aaacagaatc	cacccagg	120
28	gccatggaaag	tttccttatca	taggtatatct	tcctcattta	ttactcactt	ctgatctagg	180
29	ccatgaacgt	tttagagcct	tggctcaaatt	ttatggacct	gttatgagtc	ttcaaattgg	240
30	ccaagttca	gtgttgtca	tttcttcagc	tgaagcagcc	aaagaggta	tgaaaactca	300
31	ggctgatgcc	ttcgccccaaac	gccctatcgt	cttggacgca	cagattgtgt	tttataatcg	360
32	gaaagatgtc	ttgtttgctt	catatggaga	tcactggagg	cagatgaaga	aaatttgat	420
33	acttgaattt	ctgagtgc当地	aaaaagttca	atcctccagg	ttaatccag	aggaagaaat	480
34	ggaggatgcc	atcacattcc	tccgttcgaa	agccggatct	ccggtaataa	ttacaaagat	540
35	catttatggc	attataattt	cgatcatgat	aagaacatcc	gttggtaatt	gtaagcaaaa	600
36	agaaagattt	ctgagtgttgc当地	ccgatgc当地	caatgaggca	gcgacgagtt	ttggcacccgc	660
37	agacgtttt	ccgacgtgaa	aattacttca	ctatattcatt	ggagctgat	caaaaaccagg	720
38	gcgttgc当地	caggagatttgc当地	acgatataact	tgaagagatt	cttaatgaac	acaagccaa	780
39	taagcctttt	gaagcggata	acttaatggc	tgttctatttgc当地	aatcttcaaa	aaaatggaaa	840
40	cgttccagtg	ccagtgaccaa	acgaaagcat	caaagcatcc	gttttgc当地	tgtttactgc	900
41	cgggagc当地	acaacttc当地	aagctacaga	atgggtaatgc当地	gcagagctga	tgaaaaatcc	960
42	aactgaacta	agaaaagcac	aagaagaatgt	tagacaagta	tttggtaaaa	tggaaaaatgt	1020
43	tgtatca	agatttcatg	atttggaaatttgc当地	cttcaaggttgc当地	gtggtaaaag	aaactctaag	1080
44	attacatcc	ccgggttgc当地	tgtatccgag	ggagtgatgc当地	gaaacacaac	gaatttgatgg	1140
45	atataaaattt	catccgaaaca	ctcgaaatttgc当地	tgtatgc当地	tgggc当地	gaagagatcc	1200
46	taataacttgg	tcggAACCTG	gaaagtttgc当地	cccagaaagg	ttaatggatgc当地	gtgcaatttgc当地	1260
47	ttataaagggg	acgacatttgc当地	aactggatgc当地	atttggatgc当地	ggaaaaagaa	tatgtcccttgc当地	1320
48	cattacttca	gttatttgc当地	atttggatgc当地	tgttatttgc当地	aatcttattat	atcattttca	1380
49	ttggaaacttgc当地	cccgatggaa	ttacacccatca	aacacttgc当地	atgactgag	ctattggcgg	1440
50	tgc当地	tccagg	aaaaaaatag	atcttgc当地	gatttgc当地	ccatatcaag	1500
51	ctcaaatatttgc当地	tcttgc当地	ataggagggt	tggaaatataat	ataataaaact	ttaatttgc当地	1560
52	atgttctaat	atgggttggg	tggatgc当地	taggttttcc	accgatcata	taatggatgc当地	1620
53	tcttgc当地	atgggtttaga	ttataatgc当地	ttgtgggttgc当地	gatttttgc当地	tgggttaat	1680
54	gatttggatgc当地	gataataata	aatttgc当地	tttttttttgc当地	caaatttgc当地	aaa	1733
57	<210>	SEQ ID NO:	2				
58	<211>	LENGTH:	500				
59	<212>	TYPE:	PRT				

RAW SEQUENCE LISTING DATE: 08/02/2001
PATENT APPLICATION: US/09/909,566 TIME: 11:03:33

Input Set : A:\BB1465 US NA Seq Listing.txt
Output Set: N:\CRF3\08022001\I909566.raw

60 <213> ORGANISM: Euphorbia lagascae
 62 <400> SEQUENCE: 2
 63 Met Glu Gln Lys Asn Leu Ser Phe Pro Ser Ile Leu Ile Ser Phe Leu
 64 1 5 10 15
 65 Leu Val Leu Ile Leu Val Val Met Arg Leu Trp Lys Lys Gln Asn
 66 20 25 30
 67 20 25 30
 68 Pro Pro Pro Gly Pro Trp Lys Phe Pro Ile Ile Gly Asn Leu Pro His
 69 35 40 45
 70 35 40 45
 71 Leu Leu Leu Thr Ser Asp Leu Gly His Glu Arg Phe Arg Ala Leu Ala
 72 50 55 60
 73 50 55 60
 74 Gln Ile Tyr Gly Pro Val Met Ser Leu Gln Ile Gly Gln Val Ser Ala
 75 65 70 75 80
 76 65 70 75 80
 77 Val Val Ile Ser Ser Ala Glu Ala Ala Lys Glu Val Met Lys Thr Gln
 78 85 90 95
 79 85 90 95
 80 Ala Asp Ala Phe Ala Gln Arg Pro Ile Val Leu Asp Ala Gln Ile Val
 81 100 105 110
 82 100 105 110
 83 Phe Tyr Asn Arg Lys Asp Val Leu Phe Ala Ser Tyr Gly Asp His Trp
 84 115 120 125
 85 115 120 125
 86 Arg Gln Met Lys Lys Ile Trp Ile Leu Glu Phe Leu Ser Ala Lys Lys
 87 130 135 140
 88 130 135 140
 89 Val Gln Ser Ser Arg Leu Ile Arg Glu Glu Glu Met Glu Asp Ala Ile
 90 145 150 155 160
 91 145 150 155 160
 92 Thr Phe Leu Arg Ser Lys Ala Gly Ser Pro Val Asn Ile Thr Lys Ile
 93 165 170 175
 94 165 170 175
 95 Ile Tyr Gly Ile Ile Ser Ile Met Ile Arg Thr Ser Val Gly Asn
 96 180 185 190
 97 180 185 190
 98 Cys Lys Gln Lys Glu Arg Leu Leu Ser Val Ala Asp Ala Val Asn Glu
 99 195 200 205
 100 195 200 205
 101 Ala Ala Thr Ser Phe Gly Thr Ala Asp Ala Phe Pro Thr Trp Lys Leu
 102 210 215 220
 103 210 215 220
 104 Leu His Tyr Ile Ile Gly Ala Glu Ser Lys Pro Arg Arg Leu His Gln
 105 225 230 235 240
 106 225 230 235 240
 107 Glu Ile Asp Asp Ile Leu Glu Glu Ile Leu Asn Glu His Lys Ala Asn
 108 245 250 255
 109 245 250 255
 110 Lys Pro Phe Glu Ala Asp Asn Leu Met Asp Val Leu Leu Asn Leu Gln
 111 260 265 270
 112 260 265 270
 113 Lys Asn Gly Asn Val Pro Val Pro Val Thr Asn Glu Ser Ile Lys Ala
 114 275 280 285
 115 275 280 285
 116 Ser Val Leu Gln Met Phe Thr Ala Gly Ser Glu Thr Thr Ser Lys Ala
 117 290 295 300
 118 290 295 300
 119 Thr Glu Trp Val Met Ala Glu Leu Met Lys Asn Pro Thr Glu Leu Arg
 120 305 310 315 320
 121 305 310 315 320
 122 Lys Ala Gln Glu Glu Val Arg Gln Val Phe Gly Glu Met Gly Lys Val
 123 325 330 335
 124 325 330 335
 125 Asp Glu Ser Arg Phe His Asp Leu Lys Phe Phe Lys Leu Val Val Lys
 126 340 345 350
 127 340 345 350
 128 Glu Thr Leu Arg Leu His Pro Pro Val Val Leu Ile Pro Arg Glu Cys
 129 355 360 365
 130 355 360 365
 131 Arg Glu Thr Thr Arg Ile Asp Gly Tyr Glu Ile His Pro Asn Thr Arg

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/909,566

DATE: 08/02/2001
TIME: 11:03:33

Input Set : A:\BB1465 US NA Seq Listing.txt
Output Set: N:\CRF3\08022001\I909566.raw

133	370	375	380
135	Ile Val Val Asn Ala Trp Ala Ile Gly Arg Asp Pro Asn Thr Trp Ser		
136	385	390	395
138	Glu Pro Gly Lys Phe Asn Pro Glu Arg Phe Lys Asp Cys Ala Ile Asp		
139	405	410	415
141	Tyr Lys Gly Thr Thr Phe Glu Leu Val Pro Phe Gly Ala Gly Lys Arg		
142	420	425	430
144	Ile Cys Pro Gly Ile Thr Ser Ala Ile Thr Asn Leu Glu Tyr Val Ile		
145	435	440	445
147	Ile Asn Leu Leu Tyr His Phe Asn Trp Glu Leu Ala Asp Gly Ile Thr		
148	450	455	460
150	Pro Gln Thr Leu Asp Met Thr Glu Ala Ile Gly Gly Ala Leu Arg Lys		
151	465	470	475
153	Lys Ile Asp Leu Lys Leu Ile Pro Ile Pro Tyr Gln Val Ser Leu Gly		
154	485	490	495
156	Ser Asn Ile Ser		
157	500		
160	<210> SEQ ID NO: 3		
161	<211> LENGTH: 502		
162	<212> TYPE: PRT		
163	<213> ORGANISM: Capsicum annuum		
165	<400> SEQUENCE: 3		
166	Met Glu Ile Gln Phe Thr Asn Leu Val Ala Phe Leu Leu Phe Leu Ser		
167	1	5	10
169	Ser Ile Ile Leu Leu Lys Lys Trp Lys Thr Gln Lys Leu Asn Leu		
170	20	25	30
172	Pro Pro Gly Pro Trp Lys Leu Pro Phe Ile Gly Ser Leu His His Leu		
173	35	40	45
175	Ala Val Ala Gly Pro Leu Pro His His Gly Leu Lys Asn Leu Ala Lys		
176	50	55	60
178	Leu Tyr Gly Pro Leu Met His Leu Arg Leu Gly Glu Ile Pro Thr Val		
179	65	70	75
181	Ile Ile Ser Ser Pro Arg Met Ala Lys Glu Val Leu Lys Thr His Asp		
182	85	90	95
184	Leu Ala Phe Ala Thr Arg Pro Lys Leu Val Val Ala Asp Ile Val His		
185	100	105	110
187	Tyr Asp Ser Thr Asp Ile Ala Phe Ser Pro Tyr Gly Glu Tyr Trp Arg		
188	115	120	125
190	Gln Ile Arg Lys Ile Cys Ile Leu Glu Leu Leu Ser Ala Lys Met Val		
191	130	135	140
193	Lys Phe Phe Ser Ser Ile Arg Gln Asp Glu Leu Ser Met Met Val Ser		
194	145	150	155
196	Ser Ile Arg Thr Met Pro Asn Phe Pro Val Asn Leu Thr Asp Lys Ile		
197	165	170	175
199	Phe Trp Phe Thr Ser Ser Val Thr Cys Arg Ser Ala Leu Gly Lys Ile		
200	180	185	190
202	Cys Arg Asp Gln Asp Lys Leu Ile Ile Phe Met Arg Glu Ile Ile Ser		
203	195	200	205
205	Leu Thr Gly Gly Phe Ser Ile Ala Asp Phe Phe Pro Thr Trp Lys Met		

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/909,566

DATE: 08/02/2001
TIME: 11:03:33

Input Set : A:\BB1465 US NA Seq Listing.txt
Output Set: N:\CRF3\08022001\I909566.raw

206	210	215	220
208	Leu His Asp Val Gly Gly Ser Lys Thr Arg Leu Leu Lys Ala His Arg		
209	225	230	235
211	Lys Ile Asp Glu Ile Leu Glu His Val Val Asn Glu His Lys Gln Asn		240
212	245	250	255
214	Arg Ala Asp Gly Gln Lys Gly Asn Gly Glu Phe Gly Gly Glu Asp Leu		
215	260	265	270
217	Ile Asp Val Leu Leu Arg Val Arg Glu Ser Gly Glu Val Gln Ile Ser		
218	275	280	285
220	Ile Thr Asp Asp Asn Ile Lys Ser Ile Leu Val Asp Met Phe Ser Ala		
221	290	295	300
223	Gly Ser Glu Thr Ser Ser Thr Thr Ile Ile Trp Ala Leu Ala Glu Met		
224	305	310	315
226	Met Lys Lys Pro Ser Val Leu Ala Lys Ala Gln Ala Glu Val Arg Gln		320
227	325	330	335
229	Val Leu Lys Glu Lys Lys Gly Phe Gln Gln Ile Asp Leu Asp Glu Leu		
230	340	345	350
232	Lys Tyr Leu Lys Leu Val Ile Lys Glu Thr Leu Arg Met His Pro Pro		
233	355	360	365
235	Ile Pro Leu Leu Val Pro Arg Glu Cys Met Lys Asp Thr Lys Ile Asp		
236	370	375	380
238	Gly Tyr Asn Ile Pro Phe Lys Thr Arg Val Ile Val Asn Ala Trp Ala		
239	385	390	395
241	Ile Gly Arg Asp Pro Glu Ser Trp Asp Asp Pro Glu Ser Phe Ser Pro		400
242	405	410	415
244	Glu Arg Phe Glu Asn Ser Ser Val Asp Phe Leu Gly Ser His His Gln		
245	420	425	430
247	Phe Ile Pro Phe Gly Ala Gly Arg Arg Ile Cys Pro Gly Met Leu Phe		
248	435	440	445
250	Gly Leu Ala Asn Val Gly Gln Pro Leu Ala Gln Leu Leu Tyr His Phe		
251	450	455	460
253	Asp Arg Lys Leu Pro Asn Gly Gln Ser His Glu Asn Leu Asp Met Thr		
254	465	470	475
256	Glu Ser Pro Gly Ile Ser Ala Thr Arg Lys Asp Asp Leu Val Leu Ile		480
257	485	490	495
259	Ala Thr Pro Tyr Asp Pro		
260	500		
263	<210> SEQ ID NO: 4		
264	<211> LENGTH: 51	<i>invalid - see item 10 on Error Summary Sheet</i>	
265	<212> TYPE: DNA		
266	<213> ORGANISM: <u>synthetic construct</u>		
268	<400> SEQUENCE: 4		
269	tcaaggagaa aaaaccccg atccatggag cagaaaaatc tctctttcc g		51
272	<210> SEQ ID NO: 5		
273	<211> LENGTH: 35		
274	<212> TYPE: DNA		
275	<213> ORGANISM: <u>synthetic construct</u>		
277	<400> SEQUENCE: 5		35
278	ggccagtcaa ttgtataacg actcaactata gggcg		

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/909,566

DATE: 08/02/2001
TIME: 11:03:33

Input Set : A:\BB1465 US NA Seq Listing.txt
Output Set: N:\CRF3\08022001\I909566.raw

281 <210> SEQ ID NO: 6
282 <211> LENGTH: 35
283 <212> TYPE: DNA
284 <213> ORGANISM: synthetic construct
286 <400> SEQUENCE: 6
287 gcggccgcga attcgaaaaa tggagcagaa aaatc 35
290 <210> SEQ ID NO: 7
291 <211> LENGTH: 35
292 <212> TYPE: DNA
293 <213> ORGANISM: synthetic construct
295 <400> SEQUENCE: 7
296 gcggccgcgg atccttagaa catcgtaat taaag 35

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/909,566

DATE: 08/02/2001

TIME: 11:03:34

Input Set : A:\BB1465 US NA Seq Listing.txt
Output Set: N:\CRF3\08022001\I909566.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:14 M:256 W: Invalid Numeric Header Field, Wrong Prior FILING DATE:YYYY-MM-DD